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NOTICE OF ALLOWANCE AND FEE(S) DUE

7590 07/27/2004

Mary L Miller
Needle & Rosenberg
127 Peachtree Street N E Suite 1200
Atlanta, GA 30303-1811

EXAMINER

FOLEY, SHANON A

ART UNIT

PAPER NUMBER

1648

DATE MAILED: 07/27/2004

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/937,862	09/28/2001	Steven Oberste	14114.0353U2	8841

TITLE OF INVENTION: TYPING OF HUMAN ENTEROVIRUSES

APPLN. TYPE	SMALL ENTITY	ISSUE FEE	PUBLICATION FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1330	\$0	\$1330	10/27/2004

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. **PROSECUTION ON THE MERITS IS CLOSED.** THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN **THREE MONTHS** FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. **THIS STATUTORY PERIOD CANNOT BE EXTENDED.** SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

- A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.
- B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

- A. Pay TOTAL FEE(S) DUE shown above, or
- B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B - Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: **Mail Stop ISSUE FEE**
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450
or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

CURRENT CORRESPONDENCE ADDRESS (Note: Use Block 1 for any change of address)

7590 07/27/2004

Mary L Miller
 Needle & Rosenberg
 127 Peachtree Street N E Suite 1200
 Atlanta, GA 30303-1811

Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission.

Certificate of Mailing or Transmission

I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below.

(Depositor's name)
(Signature)
(Date)

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nonprovisional	NO	\$1330	\$0	\$1330	10/27/2004

EXAMINER	ART UNIT	CLASS-SUBCLASS
FOLEY, SHANON A	1648	435-005000

1. Change of correspondence address or indication of "Fee Address" (37 CFR 1.363).

- ☐ Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.
- ☐ "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.

2. For printing on the patent front page, list

- (1) the names of up to 3 registered patent attorneys or agents OR, alternatively,
- (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.

1	_____
2	_____
3	_____

3. ASSIGNEE NAME AND RESIDENCE DATA TO BE PRINTED ON THE PATENT (print or type)

PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.

(A) NAME OF ASSIGNEE

(B) RESIDENCE: (CITY and STATE OR COUNTRY)

Please check the appropriate assignee category or categories (will not be printed on the patent); ☐ individual ☐ corporation or other private group entity ☐ government

4a. The following fee(s) are enclosed:

- ☐ Issue Fee
- ☐ Publication Fee (No small entity discount permitted)
- ☐ Advance Order - # of Copies _____

4b. Payment of Fee(s):

- ☐ A check in the amount of the fee(s) is enclosed.
- ☐ Payment by credit card. Form PTO-2038 is attached.
- ☐ The Director is hereby authorized by charge the required fee(s), or credit any overpayment, to Deposit Account Number _____ (enclose an extra copy of this form).

5. Change in Entity Status (from status indicated above)

- ☐ a. Applicant claims SMALL ENTITY status. See 37 CFR 1.27. ☐ b. Applicant is not claiming SMALL ENTITY status. See, e.g., 37 CFR 1.27(g)(2).

The Director of the USPTO is requested to apply the Issue Fee and Publication Fee (if any) or to re-apply any previously paid issue fee to the application identified above.

NOTE: The Issue Fee and Publication Fee (if required) will not be accepted from anyone other than the applicant; a registered attorney or agent; or the assignee or other party in interest as shown by the records of the United States Patent and Trademark Office.

(Authorized Signature)

(Date)

This collection of information is required by 37 CFR 1.311. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, Virginia 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, Virginia 22313-1450.

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TRANSMIT THIS FORM WITH FEE(S)



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FOLEY, SHANON A

ART UNIT PAPER NUMBER

1648

DATE MAILED: 07/27/2004

Determination of Patent Term Extension under 35 U.S.C. 154 (b) (application filed after June 7, 1995 but prior to May 29, 2000)

The Patent Term Extension is 0 day(s). Any patent to issue from the above-identified application will include an indication of the 0 day extension on the front page.

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Extension is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (<http://pair.uspto.gov>).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (703) 305-1383. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.

Notice of Allowability

Application No.

09/937,862

Examiner

Shanon Foley

Applicant(s)

OBERSTE ET AL.

Art Unit

1648

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 7/9/2004.
2. ☒ The allowed claim(s) is/are 1,2 and 6-11.
3. ☒ The drawings filed on 28 September 2001 are accepted by the Examiner.
4. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☒ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|---|--|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____. |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____. |

Art Unit: 1648

EXAMINER'S AMENDMENT

It is currently noted that claim 2 of the instant amendment is dependent on claim 1 and that in the previous amendment, claim 2 was inadvertently dependent upon itself. It is determined that this claim has never been amended since the instantly presented claim 2 is an exact copy of the originally presented claim 2.

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Gwendolyn D. Spratt (Registration No. 36,016) on July 23, 2004.

The application has been amended as follows to correct inadvertently omitted words in the amendment submitted July 9, 2004:

In claim 1, line 3, --RNA-- was inserted after "purifying".

In claim 1, line 4, --transcribing-- was inserted after "reverse".

In claim 1, line 5, --provide-- was inserted after "to".

In addition, claim 8 has been amended to depend on claim 1 to avoid repetition of the limitations recited in claim 7.

The following is an examiner's statement of reasons for allowance:

Art Unit: 1648

As stated previously, the prior art does not teach or suggest a primer comprising SEQ ID NO: 19 or using a primer comprising SEQ ID NO: 22 with a primer comprising SEQ ID NO: 19.

The prior art also does not teach or suggest the use of SEQ ID NO: 86 in combination with SEQ ID NO: 83, SEQ ID NO: 84 or SEQ ID NO: 85. The prior art does not teach or suggest SEQ ID NO: 83 or SEQ ID NO: 84.

Regarding SEQ ID NO: 85, US 6,551,795 teaches SEQ ID NO: 19947, which has 100% sequence identity to the instant SEQ ID NO: 85, see the sequence alignment provided. However, US 6,551,795 does not teach or suggest this sequence in combination with the instant SEQ ID NO: 86.

In addition, the sequence of SwissProt database accession no: P12915 submitted October 1, 1998, possesses 100% sequence identity to the instant SEQ ID NO: 85, see the sequence alignment provided. However, there is no teaching or suggestion for using this sequence in combination with SEQ ID NO: 86, which is required by the instant claim 6.

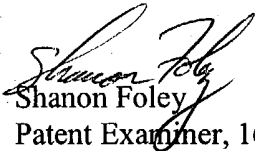
Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shanon Foley whose telephone number is (571) 272-0898. The examiner can normally be reached on M-F 9:30 AM - 6:00 PM.

Art Unit: 1648

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Housel can be reached on (571) 272-0902. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Shanon Foley
Patent Examiner, 1648

Notice of References Cited

Application/Control No.

09/937,862

Applicant(s)/Patent Under
Reexamination
OBERSTE ET AL.

Examiner

Shanon Foley

Art Unit

1648

Page 1 of 1

U.S. PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Name	Classification
	A	US-			
	B	US-			
	C	US-			
	D	US-			
	E	US-			
	F	US-			
	G	US-			
	H	US-			
	I	US-			
	J	US-			
	K	US-			
	L	US-			
	M	US-			

FOREIGN PATENT DOCUMENTS

*		Document Number Country Code-Number-Kind Code	Date MM-YYYY	Country	Name	Classification
	N					
	O					
	P					
	Q					
	R					
	S					
	T					

NON-PATENT DOCUMENTS

*		Include as applicable: Author, Title Date, Publisher, Edition or Volume, Pertinent Pages)
	U	sequence alignment of instant SEQ ID NO: 85 with SEQ ID NO: 19947 of US Patent 6,551,795 in the Issued Patents AA database with an earliest prior filing date of February 18, 1998.
	V	sequence alignment of instant SEQ ID NO: 85 with SwissProt database accession no: P12915 submitted October 1, 1998.
	W	
	X	

*A copy of this reference is not being furnished with this Office action. (See MPEP § 707.05(a).)
Dates in MM-YYYY format are publication dates. Classifications may be US or foreign.

11

RESULT 1
US-09-252-991A-19947
Sequence 19947, Application US/09252991A
Patent No. 6551795
GENERAL INFORMATION:
APPLICANT: Marc J. Rubenfield et al.
TITLE OF INVENTION: NUCLEIC ACID AND AMINO ACID SEQUENCES RELATING TO PSEUDOMONAS
FILE REFERENCE: 107196.136
CURRENT APPLICATION NUMBER: US/09/252,991A
CURRENT FILING DATE: 1999-02-18
PRIOR APPLICATION NUMBER: US 60/074,788
PRIOR FILING DATE: 1998-02-18
PRIOR APPLICATION NUMBER: US 60/094,190
PRIOR FILING DATE: 1998-07-27
NUMBER OF SEQ ID NOS: 33142
SEQ ID NO 19947
LENGTH: 143
TYPE: PRT
ORGANISM: Pseudomonas aeruginosa
US-09-252-991A-19947

Query Match
Best Local Similarity 100.0%; Score 7; DB 4; Length 143;
Matches 7; Conservative 100.0%; Pred. No. 0.45;
0; Mismatches 0; Indels 0; Gaps 0;

QY 1 QAAETGA 7
|||||
Db 85 QAAETGA 91

J. Gen. Virol. 69:253-263(1988).
 [2]
 RX X-RAY CRYSTALLOGRAPHY (3.0 ANGSTROMS) OF 2-840.
 RX MEDLINE=95292108; PubMed=7773791;
 RA Smyth M., Tate J., Hoey E.M., Lyons C., Martin S.J., Stuart D.;
 RT "Implications for viral uncoating from the structure of bovine
 enterovirus.";
 RL Nat. Struct. Biol. 2:224-231(1995).
 CC -|- FUNCTION: P3C POLYPEPTIDE IS A PROTEASE THAT CLEAVES AT CERTAIN
 CC Q/G SITES IN THE POLYPROTEIN. IT MAY BE A CYSTEINE PROTEASE.
 CC -|- CATALYTIC ACTIVITY: Selective cleavage of Gln-|-Gly bond in the
 CC poliovirus polyprotein. In other picornavirus reactions Glu may be
 CC substituted for Gln, and Ser or Thr for Gly.
 CC -|- CATALYTIC ACTIVITY: N nucleoside triphosphate = N diphosphate +
 CC (RNA) (N).
 CC -|- SUBUNIT: The virus capsid is composed of 60 icosahedral units,
 CC each of which is composed of one copy each of proteins VP1, VP2,
 CC VP3, and VP4.
 CC -|- PFM: Specific enzymatic cleavages in vivo yield mature proteins.
 CC -|- SIMILARITY: THE PROTEASE BELONGS TO PEPTIDASE FAMILY C3.
 CC -----
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 CC -----
 DR EMBL; D00214; BAA24003.1; ALT_SEQ.
 DR PIR; A29824; GNNYBE.
 DR PDB; 1BEV; 16-SEP-98.
 DR MEROPS; C03.UFA; --
 DR InterPro; IPR004004; Calici_pol_hel.
 DR InterPro; IPR003003; Cys_Ser_trypsin.
 DR InterPro; IPR000199; Pept_3C_picorn.
 DR InterPro; IPR000081; Peptidase_C3.
 DR InterPro; IPR003138; Pico_P1A.
 DR InterPro; IPR002527; Pico_P2B.
 DR InterPro; IPR001676; Rhv.
 DR InterPro; IPR006005; RNA_helicase.
 DR InterPro; IPR007095; RNA_pol_DS_PS.
 DR InterPro; IPR001205; RNA_pol_P3D.
 DR InterPro; IPR007094; RNA_pol_P5Vir.
 DR InterPro; IPR008975; Viral_cap_coat.
 DR Pfam; PF00548; Cys-Protease_3C; 1.
 DR Pfam; PF02226; Pico_P1A; 1.
 DR Pfam; PF00947; Pico_P2A; 1.
 DR Pfam; PF01552; Pico_P2B; 1.
 DR Pfam; PF00073; rhv; 3.
 DR Pfam; PF00680; RNA_dep_RNA_pol; 1.
 DR Pfam; PF00910; RNA_helicase; 1.
 DR PRINTS; PR00918; CALICIVIRUSN.
 DR ProDom; PD001125; Cys_protease_3C; 1.
 DR ProDom; PD001306; Pico_P2A; 1.
 DR ProDom; PD001374; Pico_P2B; 1.
 KW Polyprotein; Coat protein; Core protein; Transferase;
 KW RNA-directed RNA polymerase; Hydrolase; Thiol protease; Myristate;
 KW 3D-structure; Lipoprotein.
 FT CHAIN 2 69
 FT CHAIN 70 317
 FT CHAIN 318 559
 FT CHAIN 560 840
 FT CHAIN 841 990
 FT CHAIN 991 1089
 FT CHAIN 1090 1419
 FT CHAIN 1420 1508
 FT CHAIN 1509 1531
 FT CHAIN 1532 1714
 FT CHAIN 1715 2175
 FT CHAIN 2 2
 FT LIPID 1678 1678
 FT ACT_SITE 1678 1678

RESULT 2
 POLG BOVEV STANDARD; PRT; 2175 AA.
 AC P12915;
 DT 01-OCT-1989 (Rel. 12, Created)
 DT 01-OCT-1989 (Rel. 12, Last sequence update)
 DT 10-OCT-2003 (Rel. 42, Last annotation update)
 DE Genome polyprotein (Contains: Coat protein VP4 (P1A); Coat protein VP2
 DE (P1B); Coat protein VP3 (P1C); Coat protein VP1 (P1D); Core protein
 DE P2A; Core protein P2B; Core protein P2C; Core protein P3A; Genome-
 DE linked protein VP3 (P3B); Picornain 3C (EC 3.4.22.28) (Protease 3C)
 DE (P3C); RNA-directed RNA polymerase P3D (EC 2.7.7.48)).
 OS Bovine enterovirus (strain VG-5-27) (BEV).
 OC Viruses; ssRNA positive-strand viruses, no DNA stage; Picornaviridae;
 OC Enterovirus.
 OC NCBI_TaxID=12065;
 RN [1]
 RN SEQUENCE FROM N.A.
 RX MEDLINE=88117392; PubMed=2828511;
 RA Earle J.A.P., Skuce R.A., Fleming C.S., Hoey E.M., Martin S.J.;
 RA "The complete nucleotide sequence of a bovine enterovirus."

PROTEASE (POTENTIAL)

FT	ACT SITE	1692	1692
FT	STRAND	26	26
FT	HELI	36	38
FT	TURN	50	50
FT	HELI	51	54
FT	STRAND	57	57
FT	TURN	83	87
FT	HELI	88	89
FT	STRAND	90	94
FT	HELI	101	102
FT	TURN	103	105
FT	HELI	113	115
FT	STRAND	123	123
FT	TURN	126	128
FT	HELI	129	129
FT	STRAND	133	134
FT	TURN	138	139
FT	HELI	142	143
FT	STRAND	147	151
FT	TURN	152	152
FT	HELI	153	155
FT	STRAND	156	157
FT	TURN	159	167
FT	HELI	168	180
FT	STRAND	185	186
FT	TURN	187	197
FT	HELI	198	198
FT	STRAND	209	212
FT	TURN	215	217
FT	HELI	219	220
FT	STRAND	224	226
FT	TURN	227	230
FT	HELI	234	238
FT	STRAND	241	245
FT	TURN	246	248
FT	HELI	251	256
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FT	TURN	267	269
FT	HELI	270	270
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FT	STRAND	356	357
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FT	HELI	361	364
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FT	TURN	410	413
FT	HELI	415	420
FT	STRAND	421	422
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FT	HELI	430	436
FT	STRAND	440	441
FT	TURN	443	443
FT	HELI	445	451
FT	STRAND	461	464
FT	TURN	465	466
FT	HELI	468	473
FT	STRAND	479	484
FT	TURN	493	494
FT	HELI	499	502

FT	HELI	503	506
FT	STRAND	510	515
FT	TURN	520	520
FT	HELI	523	524
FT	STRAND	528	537
FT	TURN	539	540
FT	HELI	542	546
FT	STRAND	550	551
FT	TURN	574	574
FT	HELI	578	578
FT	STRAND	582	582
FT	TURN	595	596
FT	HELI	597	598
FT	STRAND	600	602
FT	TURN	610	613
FT	HELI	619	619
FT	STRAND	624	624
FT	TURN	626	628
FT	HELI	629	629
FT	STRAND	630	634
FT	TURN	638	641
FT	HELI	644	644
FT	STRAND	647	649
FT	TURN	651	655
FT	HELI	662	668
FT	STRAND	669	670
FT	TURN	671	685
FT	HELI	687	687
FT	STRAND	689	690
FT	TURN	693	693
FT	HELI	699	705
FT	STRAND	707	708
FT	TURN	718	721
FT	HELI	727	731
FT	STRAND	732	733

Query Match 100.0%; Score 7; DB 1; Length 2175;

Best Local Similarity 100.0%; Pred. No. 5.7;

Mismatches 7; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

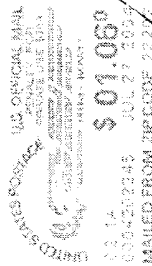
QY 1 QAETGA 7

Db 598 QAETGA 604

Figure 1 is a line graph showing the percentage of total protein in the supernatant fraction versus the percentage of total protein in the pellet fraction. The x-axis is labeled "PERCENTAGE OF TOTAL PROTEIN IN PELLET FRACTION" and ranges from 0 to 100. The y-axis is labeled "PERCENTAGE OF TOTAL PROTEIN IN SUPERNATANT FRACTION" and ranges from 0 to 100. A diagonal line from (0,100) to (100,0) represents the theoretical distribution. Data points for various proteins are plotted, showing their relative distribution between the two fractions. The proteins and their approximate coordinates (Pellet %, Supernatant %) are: BSA (10, 90), IgG (15, 85), Pepsin (20, 80), Trypsin (25, 75), Chymotrypsin (30, 70), Elastase (35, 65), and a group of enzymes (40, 60) including Amylase, Lipase, and Maltase. The graph illustrates that most proteins are found in the supernatant fraction, with BSA being the most abundant.

IF UNDELIVERABLE RETURN IN TEN DAYS

AN EQUAL OPPORTUNITY EMPLOYER



REC: CENTER 1600/2900

XLCD-121

